

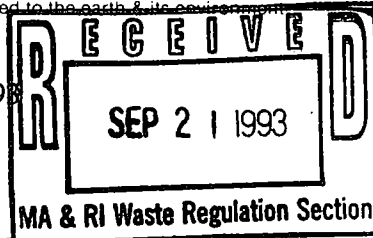
Woodward-Clyde Consultants



Engineering & sciences applied to the earth & its environment

REC'D 9-22-93
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September 15, 1993
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Mr. Frank Battaglia
United States Environmental Protection Agency - Region I
Waste Management Building
90 Canal Street
Boston, Massachusetts 02114

**Re: Former CIBA-GEIGY Facility
Cranston, Rhode Island - Stabilization Action
Draft Stabilization Design Documents - Submittal Package**

Dear Mr. Battaglia:

In accordance with your letter dated August 30, 1993, CIBA-GEIGY is proceeding with the development of the Draft Stabilization Design Documents (DSDD) for the former CIBA-GEIGY facility in Cranston, Rhode Island. Woodward-Clyde Consultants (WCC) has reviewed the Consent Order Modification (EPA ID No. RID001194323) to determine what deliverables are required for this submittal. Based upon our review of the Consent Order Modification and USEPA's comments on the Stabilization Investigation Report and Design Concepts Proposal, we have prepared a detailed outline for the DSDD package that will be submitted to USEPA on November 30, 1993.

The proposed DSDD package consists of the following main components:

- Design Drawings
- Technical Specifications
- Preliminary Operation and Maintenance (O&M) Manual
- Final Performance Standards
- Confirmatory Sampling Plan
- Project Management Plan

A description of each component is presented here:

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SEMS DocID 654190

I. Design Drawings

The following design drawings will be submitted as part of the DSDD:

<u>Description</u>	<u>Estimated Percent Complete</u>
Cover Sheet	90
Index of Drawings	60
Site Plan/General Location	90
Demolition Plan - First Floor	80
Demolition Plan - Second Floor	60
Pretreatment Equipment Layout - First Floor	90
Pretreatment Equipment Layout - Second Floor	80
Soil Vapor Extraction System (SVES) - Layout	80
SVES - Sections and Details	60
SVES - Sections and Details	60
Equalization Area - Spill Containment	80
Recovery Well Modifications	80
Miscellaneous Sections and Details	60
Miscellaneous Sections and Details	60
Electric and Gas Service Routing	60
Process and Instrumentation Diagrams (10 sheets total)	90
Electrical Single-Line Diagrams	70
Power Distribution Plan - First Floor	50
Power Distribution Plan - Second Floor	50
Power Distribution Plan - Exterior	60

II. Technical Specifications

The following technical specification divisions will be submitted as part of the DSDD:

<u>Description</u>	<u>Estimated Percent Complete</u>
Division 1 - General Requirements	90
Division 2 - Site Work	80
Division 3 - Concrete	50
Division 4 - Masonry	60
Division 5 - Metals	60
Division 6 - Wood and Plastic	40
Division 8 - Doors and Windows	40



<u>Description</u>	<u>Estimated Percent Complete</u>
Division 9 - Finishes	40
Division 10 - Specialties	40
Division 11 - Equipment	60
Division 13 - Instrumentation	80
Division 15 - Mechanical	80
Division 16 - Electrical	60

III. Operation and Maintenance Manual

The following sections of the operation and maintenance manual will be submitted as part of the DSDD:

<u>Description</u>	<u>Estimated Percent Complete</u>
Section 1 - Introduction	90
Section 2 - Safety and Housekeeping	80
Section 3 - System Description	60
Section 4 - Equipment and Vendor Information	40
Section 5 - Control Loop Descriptions	70
Section 6 - System Operation	50
Section 7 - Maintenance and Repair	20
Section 8 - Potential Operating Problems	20
Section 9 - Sampling/Laboratory Testing Protocol	40
Section 10 - Record Drawings	0
Section 11 - Operation and Maintenance Costs	40

IV. Final Performance Standards

Final performance standards will be proposed for each stabilization actions. Performance standards will be developed for the groundwater recovery system, groundwater pretreatment system and the soil vapor extraction (SVE) system.

V. Confirmatory Sampling Plan

Confirmatory sampling plans for each of the stabilization actions proposed will be submitted as part of the DSDD package. Confirmatory sampling plans will be developed for the groundwater recovery system, groundwater pretreatment system and the soil vapor extraction (SVE) system.



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VI. Project Management Plan

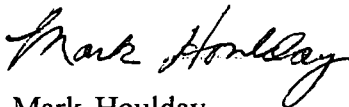
A project management plan for the stabilization action design activities will be submitted as part of the DSDD package. The project management plan will include information on project organization, project schedule, implementation, and contingencies.

If you have any questions, or require additional information on our proposed DSDD submittal package, please feel free to call us at (201) 785-0700.

Very truly yours,



Joseph J. Corrado, P.E.
Design Manager



Mark Houlday
Project Manager

cc: Diane Leber - CIBA, Ardsley

